Collaborative Laboratory for Human Embryonic Stem Cell Research at Sanford-Burnham Medical Research Institute

Grant Award Details

Collaborative Laboratory for Human Embryonic Stem Cell Research at Sanford-Burnham Medical Research Institute

Grant Type: Shared Labs

Grant Number: CL1-00511-1.1

Investigator:

Name:	Jeanne Loring
Institution:	Scripps Research Institute
Type:	PI

Award Value: $1,361,825

Status: Closed

Grant Application Details

Application Title: Collaborative Laboratory for Human Embryonic Stem Cell Research

Public Abstract: We are proposing to expand our “safe haven” human embryonic stem cell laboratory to accommodate the enormous interest in scientific research in this field, and to provide an environment that is conducive to the goals of the CIRM’s Strategic Plan. Our collaborative Shared Laboratory will support the research of all of our institution’s many stem cell researchers, including the new investigators who have been recently approved for funding under the CIRM’s SEED grant program. In addition, we will cooperate will neighboring institutions to minimize overlap in strategic technological areas and maximize the value of CIRM’s investment in our scientific community. The scientists in our program will share their special expertise in the areas of human ES cell derivation and molecular analysis.

All aspects of the Shared Laboratory will be directed by the Program Director, a well-established senior stem cell scientist who has experience in laboratory design and management of large groups of researchers. An Oversight Committee, composed of leading scientists, ethicists, and institution management will meet regularly to monitor and oversee the activities of the Laboratory.

We will also offer a series of Basic and Advanced Stem Cell Techniques Courses on behalf of our local scientific community. A Public Education Program will provide non-scientists with the opportunity to have hands-on experience with hESC research. Alumni from the courses will have access to an interactive web-based discussion group, and will meet once a year to share their scientific discoveries and insights. By closely collaborating with other California institutions, we plan to take full advantage of CIRM’s investment in stem cell research and speed the translation of stem cell-based therapies to the clinic

Statement of Benefit to California:	Californians are a large and diverse population that poses unique challenges for the future of medical care. Fortunately, California has a tradition of taking the lead in technology and medical breakthroughs and following through from the first idea to the final product. A major goal for California's supporters of stem cell research is development of stem cell-based products that have medical use, and the mandate for the research community is to provide the best possible fundamental information to help guide clinical applications. We have already laid the groundwork for research that encompasses both federally approved and non-approved human embryonic stem cells (hESC) by establishing a privately funded safe haven stem cell laboratory and founding a non-profit IRB-approved storage facility for excess embryos that have been donated for research. We have created an informational website and generated the largest worldwide public database of molecular information from our analyses of approved and non-approved hESC. We have been offering hands-on comprehensive courses in hESC technologies for three years, and have launched popular programs for scientific and ethical discussions that are regularly attended by hundreds of Californians. We propose to build on this foundation and expand our breadth and depth in stem cell biology through creation of a CIRM-supported collaborative Shared Laboratory and Stem Cell Techniques Course. We have designed this program to maximize benefit to both our own and neighboring institutions, to enhance collaborative interaction and open doors for the next generation of stem cell scientists. The Laboratory and Course will be a magnet for other researchers to contribute their own expertise, which will leverage the power of the California stem cell community. The program will be a springboard to new commercial ventures and will speed the development of clinical applications for stem cells that will benefit all Californians.